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| APPLICATION NO. | | FILING DATE | 3 | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|----------------------|----------------------------------|---|----------------------|---------------------|------------------|
| | 10/696,051 | 10/28/2003 | • | Su Chen | 034827-2601 | 5893 |
| | 30542 FOLEV & LAI | 7590 07/16/2007 & LARDNER LLP | | | EXAMINER | |
| | P.O. BOX 80278 | | | MOSS, KERI A | | |
| | SAN DIEGO, | IEGO, CA 92138-0278 | | | ART UNIT | PAPER NUMBER |
| | | | | | 1743 | |
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| | | | , | | 07/16/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|--------------|--|--|--|--|
| | 10/696,051 | CHEN, SU | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Keri A. Moss | 1743 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowar | Responsive to communication(s) filed on This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) 1-45 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-45 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/6/04. | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | ate | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims **1-45** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In the independent claims, it is unclear what is meant by "said oxygen-18 labeled organic acid is not oxygen-18 labeled homovanillic acid or includes at least two oxygen-18 labeled organic acids." What is the "or" referring to? Does it mean that if the labeled organic acid is homovanillic acid, then there must be at least two oxygen-18 labeled organic acids?
- 3. Claims **2**, **14** and **42** recite the limitation "said detection." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.

- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims **1-45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Magera et al (Determination of homovanillic acid in urine by stable isotope dilution and electrospray tandem mass spectrometry, Clinica Chimica Acta, vol. 306, pgs. 35-41(2000)) in view of Youhnovski et al (Determination of Hydroxyoctadecadienoic Acids, Z. Naturforsch, 58c, pgs 268-279 (2003)). Magera teaches a method of detecting a metabolic disorder by testing urine samples for an organic acid comprising the steps of adding an identical organic acid that is oxygen-18 labelled, processing the sample, measuring the amount of unlabled organic acid and oxygen-18 organic acid in the processed sample by using gas or liquid chromatography-mass spectrometry (Materials and Methods Section), and using the amount of oxygen-18 organic acid measured to adjust the amount of unlabled organic acid measured in the processed sample so as to

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reflect the amount of unlabeled organic acid present in the sample (Results Section).

Magera does this by creating a standard calibration curve with unlabeled and labelled organic acid (Results Section).

Magera teaches the above method using oxygen-18 labeled homovanillic acid, wheras the applicant has claimed a method that does not use oxygen-18 labeled homovanillic acid. Youhnovski teaches that this method using an internal standard labeled with oxygen 18 to determine the amount of an unlabeled organic acid can be used with other organic acids, such as hydroxyoctadecadienoic acids (Introduction section). Youhnovski also teaches a new preparation of the standard and separation procedure that minimizes the losses of the organic acid during sample preparation (Introduction). It would have been obvious for one of ordinary skill in the art to modify the method of Magera by using the sample preparation method of Youhnovski on organic acids other than homovanillic acid in order to gain the advantages of decreased loss of the internal standard, thereby increasing the accuracy of the calibration and results.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keri A. Moss whose telephone number is 571-272-8267. The examiner can normally be reached on 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Keri A. Moss Examiner Art Unit 1743

KAM 6/22/07

Supervisory Patent Examiner Technology Center 1700